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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/040,648

01/07/2002

Andreas Engelsberg

1881

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7590

08/03/2005

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EXAMINER

VO, HUYEN X

ART UNIT

PAPER NUMBER

2655

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/040,648	<b>Applicant(s)</b> ENGELSBURG ET AL.	
	<b>Examiner</b> Huyen X. Vo	<b>Art Unit</b> 2655	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant has submitted an amendment filed 5/19/2005 arguing to traverse the art rejection based on an argument regarding "*Coorman also fails to teach or suggest including a set of phonetic translation hints in the data stream of the multimedia data in addition to the textual description*" (see remarks section). Applicant's argument has been fully considered but it is not persuasive. Coorman et al. teach a text-to-speech synthesis system in that input text is processed into an input phonetic data sequence, which is then converted into a multi-layer internal data sequence known as extended phonetic transcription that includes phonetic descriptors, symbol descriptors, and prosodic descriptors (*col. 9, line 1-59*). The phonetic descriptors specify the speech synthesizer the exact phonetic units to select for use in synthesizing speech. Therefore, phonetic descriptors are considered as "*phonetic transcription hints*".
2. The specification of the present application also points out that a prior art of reference (*see paragraph [0024]*) describing that xml elements are defined for describing how the elements of a text are to be pronounced exactly. The xml can be considered as "*phonetic transcription hints*". Applicant is advised to specifically and clearly describe how the "phonetic transcription hints" differs from phonetic descriptors and/or elements included in the xml discussed in prior art of record. Until then examiner maintains previous grounds of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-6, 8-9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (US Patent No. 6593936) in view of Coorman et al. (US Patent No. 6665641).

5. Regarding claim 1, Huang et al. disclose a method for upgrading a data stream of multimedia data, said data stream comprising features with textual description, said textual description is interpreted and synthesized into spoken voice (*col. 10, lines 1-67*). Huang et al. fail to specifically disclose the method comprising including a set of phonetic translation hints in the data stream in addition to the textual description, and wherein said phonetic translation hints specify the phonetic transcription of parts or words of the textual description.

However, Coorman et al. teach the method comprising including a set of phonetic translation hints in the data stream in addition to the textual description, and wherein said phonetic translation hints specify the phonetic transcription of parts or words of the textual description (*col. 9, lines 1-56 and also referring to the XPT section on col. 10, lines 20-55*).

Since Huang et al. and Coorman et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Huang et al. by incorporating the teaching of Coorman et al. in order to enhance speech quality.

6. Regarding claim 2, Huang et al. fail to disclose the method according to claim 1, wherein each of said phonetic translation hints is followed by a word and said phonetic transcription of said word. However, Coorman et al. further teach that each of said phonetic translation hints is followed by a word and said phonetic transcription of said word (*col. 9, lines 19-25*).

Since Huang et al. and Coorman et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Huang et al. by incorporating the teaching of Coorman et al. in order to enhance speech quality.

7. Regarding claims 4-5, the modified Huang et al. further disclose the method according to claim 1, wherein said phonetic translation hints are embedded in a data stream associated with textual type descriptors (*col. 5, lines 11-67*), and wherein said MPEG data stream is an MPEG-7 data stream (*col. 5, lines 11-67*).

8. Regarding claim 6, Huang et al. fail to specifically disclose the method according to claim 1, further comprising referring to an alphabet in a predetermined format for

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representation of phonetic transcription information. However, Coorman et al. further teach the step of referring to an alphabet in a predetermined format for representation of phonetic transcription information (*col. 9, lines 1-25*).

Since Huang et al. and Coorman et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Huang et al. by incorporating the teaching of Coorman et al. in order determine/select appropriate phonetic data to represent the text.

9. Regarding claim 8, Huang et al. fail to disclose the method according to claim 1, wherein said phonetic translation hints include a limited number of phonemes. However, Coorman et al. further teach that the phonetic translation hints include a limited number of phonemes (*col. 10, lines 1-17*).

Since Huang et al. and Coorman et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Huang et al. by incorporating the teaching of Coorman et al. in order reduce processing time.

10. Regarding claim 9, the modified Huang et al. fail to disclose the method according to claim 8, wherein said phonemes are represented with a binary fixed length or variable length code. However, since the system in both Huang et al. and Coorman et al. is digital, phonemes must be represented by binary in either fixed/variable length. The advantage of this is to facilitate storage and recovering of data in digital system.

11. Regarding claim 11, the modified Huang et al. disclose the method according to claim 1, further comprising storing said phonetic translation hints in a text-to-speech system to better identify corresponding elements of the textual description (*referring claim 1*), but fail to disclose the step of storing said phonetic translation hints in a text-to-speech system to better identify corresponding elements of the textual description. However, it would have been obvious to one of ordinary skill in the art at the time of invention to include this step in speech recognition system in order to reduce the load on speech recognizer.

12. Regarding claim 12, Huang et al. further disclose the method according to claim 11, wherein the phonetic translation hints together with the corresponding elements of the textual description are implemented in text-to-speech interfaces, in which said textual description is used in combination with phonetic information for search or filtering of information (*figure 9*).

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (US Patent No. 6593936) in view of Coorman et al. (US Patent No. 6665641), as applied to claims 1 and 2, and further in view of Carter et al. (US Patent No. 6600814).

14. Regarding claim 3, the modified Huang et al. fail to disclose a method according to claim 1 or 2, wherein each of said phonetic translation hints with said phonetic

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transcription is valid for at least a portion of said textual description without requiring repetition of said phonetic transcription for each occurrence of a word, for which the phonetic transcription is given, in said textual description. However, Carter et al. teach that each of said phonetic translation hints with said phonetic transcription is valid for at least a portion of said textual description without requiring repetition of said phonetic transcription for each occurrence of a word, for which the phonetic transcription is given, in said textual description (*col. 4, lines 1-23*).

Since the modified Huang et al. and Carter et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Huang et al. by incorporating the teaching of Carter et al. in order to reduce the load on the text-to-speech synthesizer.

15. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (US Patent No. 6593936) in view of Coorman et al. (US Patent No. 6665641), as applied to claim 1, and further in view of Sharman (US Patent No. 5682501).

16. Regarding claim 7, the modified Huang et al. fail to disclose the method according to claim 6, wherein said alphabet is an international phonetic alphabet or SAMPA. However, Sharman teaches that the alphabet is an international phonetic alphabet (*col. 8, lines 1-9*).



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Since the modified Huang et al. and Sharman are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Huang et al. by incorporating the teaching of Sharman in order to synthesize speech.

17. Regarding claim 10, the modified Huang et al. fail to disclose the method according to claim 9, wherein coding of said phonemes takes into account statistics of the phonemes. However, Sharman further teaches that coding of said phonemes takes into account statistics of the phonemes (*col. 8, lines 28-47*).

Since the modified Huang et al. and Sharman are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Huang et al. by incorporating the teaching of Sharman in order to enhance accuracy in determining phonemes.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

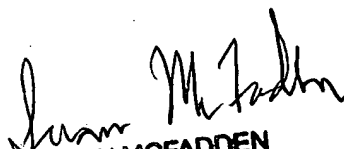
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HXV

7/25/2005

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SUSAN MCFADDEN  
PRIMARY EXAMINER